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**Woodley, Jr.**

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(54) **SOLAR-POWERED CELL PHONE**

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***H04B 1/38*** (2015.01)
***H04M 19/08*** (2006.01)

(52) **U.S. Cl.**
CPC ..... ***H04M 19/08*** (2013.01)

(58) **Field of Classification Search**
CPC .... H04M 19/08; H04B 1/3883; H04B 1/3833
USPC ..... 455/573, 90.3
See application file for complete search history.

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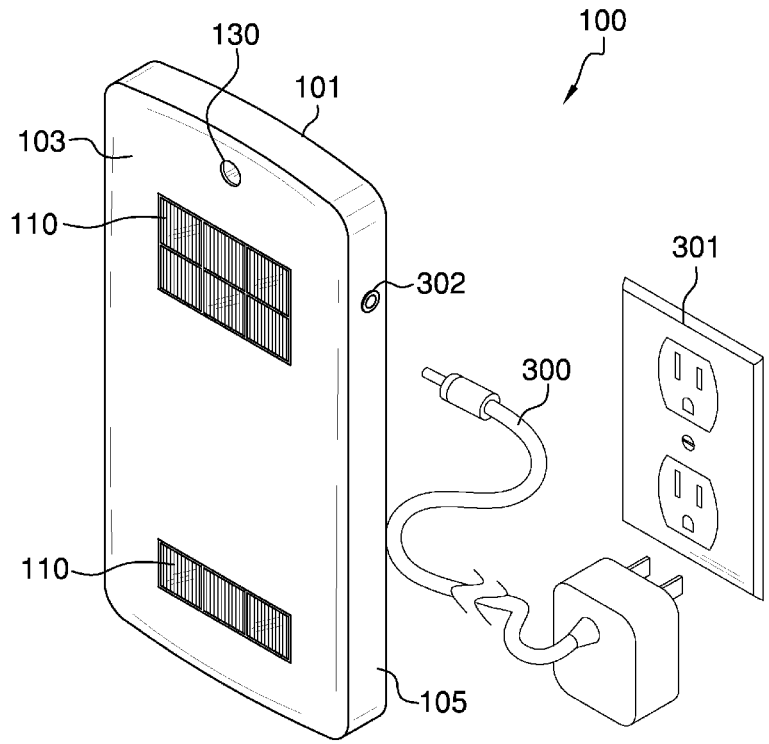
(57) **ABSTRACT**

The solar-powered cell phone is a cell phone wherein a back surface includes at least one solar cell thereon. The solar cell being in wired communication with a charge controller that is in turn in wired communication with an energy storage member and a light sensor. The energy storage member is in wired communication with an inverter that in turn supplies electricity to a cell phone CPU, cell phone display, and a SIM card. The solar cell(s) generate electricity when exposed to light, and the electricity generated is either stored on the energy storage member or is actively used via the cell phone.

**3 Claims, 4 Drawing Sheets**



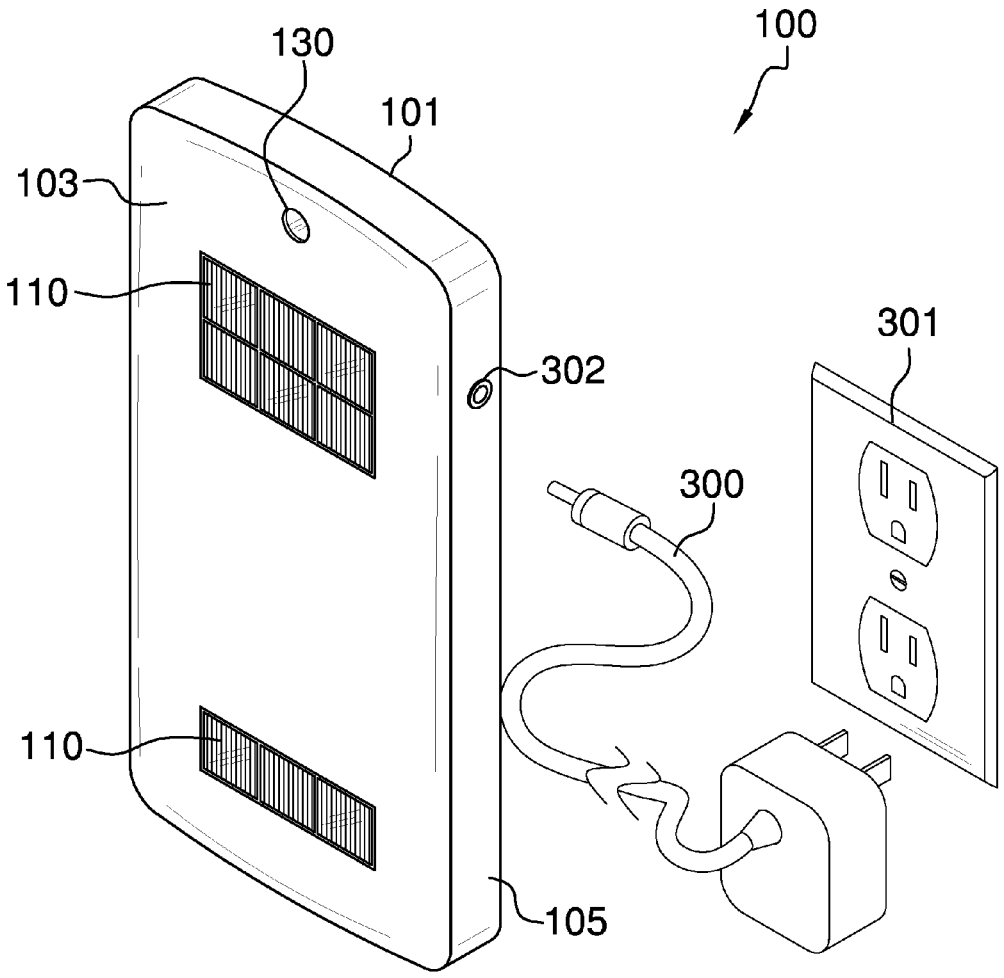



FIG. 1

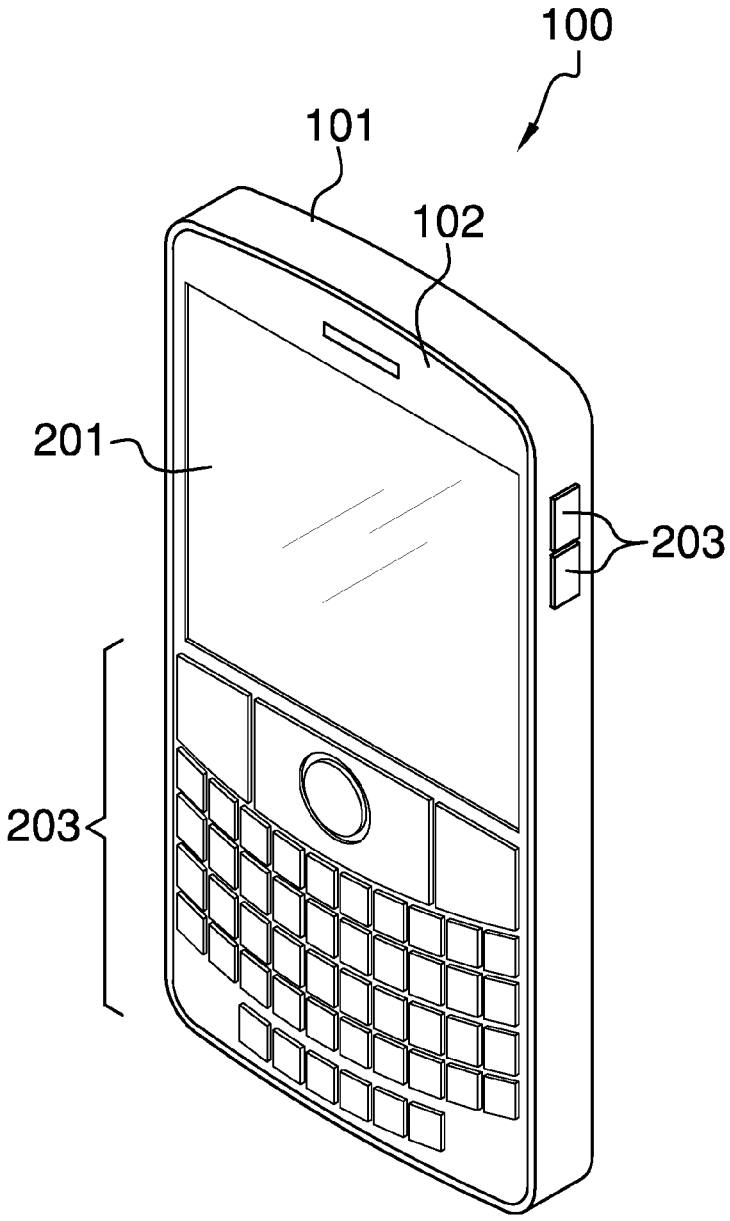



FIG. 2

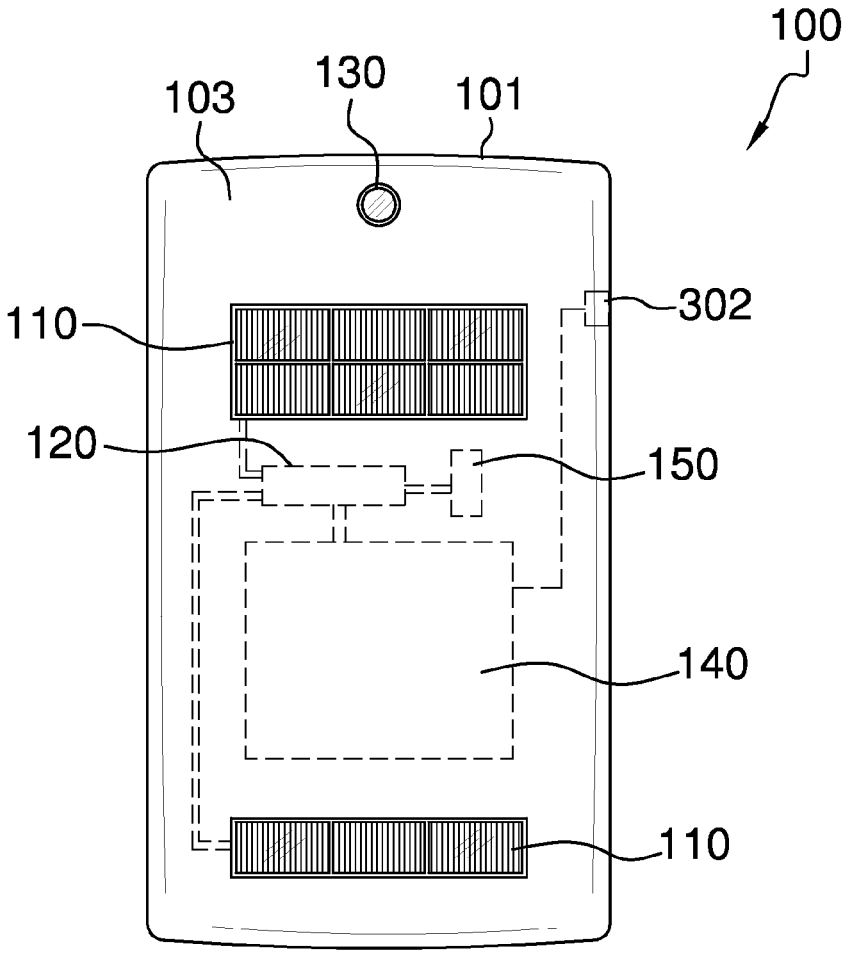



FIG. 3

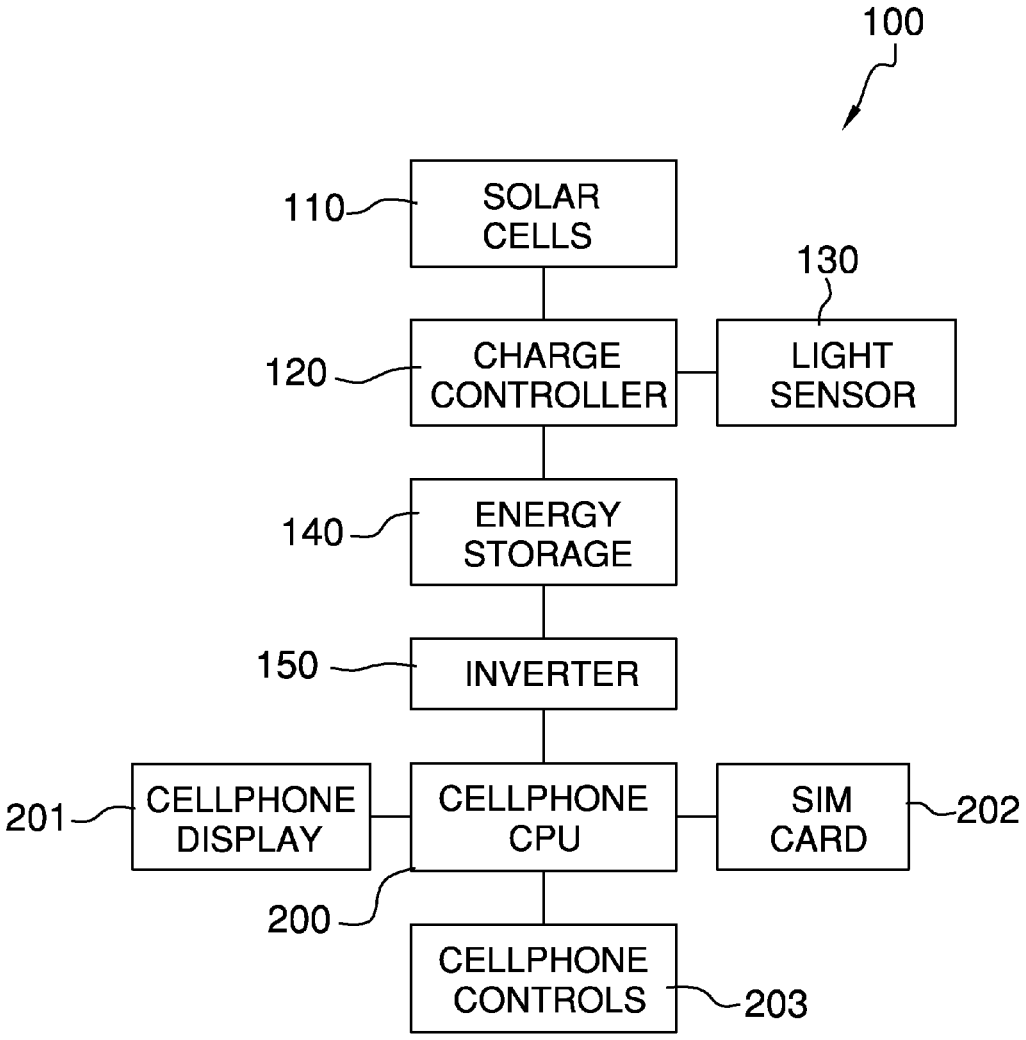

100
110
SOLAR CELLS
130
120
CHARGE CONTROLLER
LIGHT SENSOR
140
ENERGY STORAGE
150
INVERTER
201
CELLPHONE DISPLAY
CELLPHONE CPU
SIM CARD
202
200
CELLPHONE CONTROLS
203

FIG. 4

# SOLAR-POWERED CELL PHONE

## CROSS REFERENCES TO RELATED APPLICATIONS

Not Applicable

## STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH

Not Applicable

## REFERENCE TO APPENDIX

Not Applicable

## BACKGROUND OF THE INVENTION

### A. Field of the Invention

The present invention relates to the field of cell phones, more specifically, a solar powered cell phone.

## SUMMARY OF THE INVENTION

An embodiment of the disclosure meets the needs presented above by generally comprising a cell phone wherein a back surface includes at least one solar cell thereon. The solar cell being in wired communication with a charge controller that is in turn in wired communication with an energy storage member and a light sensor. The energy storage member is in wired communication with an inverter that in turn supplies electricity to a cell phone CPU, cell phone display, and a SIM card. The solar cell(s) generate electricity when exposed to light, and the electricity generated is either stored on the energy storage member or is actively used via the cell phone.

These together with additional objects, features and advantages of the solar-powered cell phone will be readily apparent to those of ordinary skill in the art upon reading the following detailed description of presently preferred, but nonetheless illustrative, embodiments of the solar-powered cell phone when taken in conjunction with the accompanying drawings.

In this respect, before explaining the current embodiments of the solar-powered cell phone in detail, it is to be understood that the solar-powered cell phone is not limited in its applications to the details of construction and arrangements of the components set forth in the following description or illustration. Those skilled in the art will appreciate that the concept of this disclosure may be readily utilized as a basis for the design of other structures, methods, and systems for carrying out the several purposes of the solar-powered cell phone.

It is therefore important that the claims be regarded as including such equivalent construction insofar as they do not depart from the spirit and scope of the solar-powered cell phone. It is also to be understood that the phraseology and terminology employed herein are for purposes of description and should not be regarded as limiting.

## BRIEF DESCRIPTION OF THE DRAWINGS

The accompanying drawings, which are included to provide a further understanding of the invention and are incorporated in and constitute a part of this specification, illustrate embodiments of the invention and together with the description serve to explain the principles of the invention:



In the drawings:

FIG. **1** is a rear, perspective view of the solar-powered cell phone.

FIG. **2** is a front, perspective view of the solar-powered cell phone.

FIG. **3** is a rear view of the solar-powered cell phone.

FIG. **4** is a block diagram of the components of the solar-powered cell phone.

## DETAILED DESCRIPTION OF THE EMBODIMENT

The following detailed description is merely exemplary in nature and is not intended to limit the described embodiments of the application and uses of the described embodiments. As used herein, the word "exemplary" or "illustrative" means "serving as an example, instance, or illustration." Any implementation described herein as "exemplary" or "illustrative" is not necessarily to be construed as preferred or advantageous over other implementations. All of the implementations described below are exemplary implementations provided to enable persons skilled in the art to practice the disclosure and are not intended to limit the scope of the appended claims. Furthermore, there is no intention to be bound by any expressed or implied theory presented in the preceding technical field, background, brief summary or the following detailed description.

As best illustrated in FIGS. **1** through **4**, the solar-powered cell phone **100** (hereinafter invention) generally comprises a cell phone housing **101** that is further defined with a front surface **102** and a rear surface **103**. The rear surface **103** of the housing **101** of the invention **100** includes at least one solar cell **110** thereon. The solar cell **110** is in wired communication with a charge controller unit **120**. The charge controller unit **120** is in wired communication with a light sensor **130**. Both the light sensor **130** and the solar cell(s) **120** are located on the rear surface **103** of the housing **101**.

The light sensor **130** is included in order to determine if light is present to the solar cell(s) **110**, and if so shall in turn signal the charge controller unit **120**. The charge controller unit **120** is also in wired communication with an energy storage member **140**. The energy storage member **140** is essentially a battery or batteries that store electricity generated via the solar cell(s) **110**. The energy storage member **140** is in wired communication with an inverter **150** that transforms electricity from a DC current to an AC current. That being said, the inverter **150** is essentially an AC/DC converter.

The inverter **150** is in wired communication with a central processing unit **200** of the invention **100**. The central processing unit **200** controls all functions associated with a cell phone, and includes a cell phone display **201**, a SIM card **202**, and cell phone controls **203**.

The invention **100** is capable of producing electricity via the solar cell(s) **110** that is stored in the energy storage member **140** before being used in operation of the cell phone. The invention **100** may alternatively route the electricity produced via the solar cell(s) **110** to the central processing unit **200**, and in which case the newly produced electricity is bypassing the energy storage member **140**. The energy storage member **140** may be alternatively re-charged via an electrical cord **300** that plugs into a standard wall outlet **301**. The electrical cord **300** plugs into a plug port **302** located on a side surface **105** of the housing **101**.

It shall be noted that the light sensor **130** is being used to detect light in order to switch use of the energy storage member **140** over to the solar cells **110** directly. While the solar

cells **110** re-charge the energy storage member **140**, the solar cells **110** can be used to provide electricity to the central processing unit **200** directly.

With respect to the above description, it is to be realized that the optimum dimensional relationship for the various components of the invention **100**, to include variations in size, materials, shape, form, function, and the manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the invention **100**.

It shall be noted that those skilled in the art will readily recognize numerous adaptations and modifications which can be made to the various embodiments of the present invention which will result in an improved invention, yet all of which will fall within the spirit and scope of the present invention as defined in the following claims. Accordingly, the invention is to be limited only by the scope of the following claims and their equivalents.

The inventor claims:

**1**. A solar-powered cell phone comprising:

a cell phone housing having at least one solar cell thereon, and in wired communication with a charge controller unit;

said charge controller unit is in wired communication between the solar cell, a light sensor, and an energy storage member;

electricity provided via the solar cell is transferred to the energy storage member that is in turn in wired communication with an inverter before said electricity is transmitted to a central processing unit;

said central processing unit is in wired communication with a cell phone display, a cell phone controls, and a SIM card;

wherein the cell phone housing is further defined with a front surface and a rear surface; wherein the rear surface of the housing includes the solar cell thereon;

wherein the light sensor and the solar cell are located on the rear surface of the housing;

wherein the light sensor determines if light is present to the solar cell, and if so shall in turn signal the charge controller unit, which in turn transmits electricity produced via the solar cell from the energy storage member to the central processing unit directly;

wherein the solar cell is used to recharge the energy storage member and provide electricity to the central processing unit;

wherein the inverter is an AC to DC converter, and transforms the electricity from the energy storage member from a DC current to an AC current before transmittal to the central processing unit.

**2**. The solar-powered cell phone according to claim **1** wherein the energy storage member is at least one battery that store electricity; wherein the energy storage member is alternatively re-charged via an electrical cord that plugs into a standard wall outlet; wherein the electrical cord plugs into a plug port located on a side surface of the housing.

**3**. A solar-powered cell phone comprising:

a cell phone housing having at least one solar cell thereon, and in wired communication with a charge controller unit;

said charge controller unit is in wired communication between the solar cell, a light sensor, and an energy storage member;

electricity provided via the solar cell is transferred to the energy storage member that is in turn in wired communication with an inverter before said electricity is transmitted to a central processing unit;

said central processing unit is in wired communication with a cell phone display, a cell phone controls, and a SIM card;

wherein the cell phone housing is further defined with a front surface and a rear surface; wherein the rear surface of the housing includes the solar cell thereon;

wherein the light sensor and the solar cell are located on the rear surface of the housing;

wherein the light sensor determines if light is present to the solar cell, and if so shall in turn signal the charge controller unit, which in turn transmits electricity produced via the solar cell from the energy storage member to the central processing unit directly;

wherein the solar cell is used to recharge the energy storage member and provide electricity to the central processing unit;

wherein the inverter is an AC to DC converter, and transforms the electricity from the energy storage member from a DC current to an AC current before transmittal to the central processing unit;

wherein the energy storage member is at least one battery that store electricity; wherein the energy storage member is alternatively re-charged via an electrical cord that plugs into a standard wall outlet; wherein the electrical cord plugs into a plug port located on a side surface of the housing.

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